

# PATENT COOPERATION TREATY

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From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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## PCT NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing  
(day/month/year) **05 OCT 2004**

Applicant's or agent's file reference

16325-140PC

### IMPORTANT NOTIFICATION

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

PCT/US03/17825 /

04 June 2003 (04.06.2003) /

04 June 2002 (04.06.2002) /

Applicant

METABOLEX, INC. /

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

12/4/04

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US

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*Janice Ford*  
*for*

Form PCT/IPEA/416 (July 1992)

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# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 16325-140PC	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/17825	International filing date (day/month/year) 04 June 2003 (04.06.2003)	Priority date (day/month/year) 04 June 2002 (04.06.2002)
International Patent Classification (IPC) or national classification and IPC IPC(7): G01N 33/566; A01N 38/18 and US Cl.: 436/501; 435/455; 514/2		
Applicant METABOLEX, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☐ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 05 January 2004 (05.01.2004)	Date of completion of this report 20 September 2004 (20.09.2004)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Bradley L. Sisson Telephone No. (703) 308-0196 <div style="text-align: right; margin-top: -50px;"> </div>

**I. Basis of the report****1. With regard to the elements of the international application:\***

- ☒ the international application as originally filed.
- ☒ the description:  
pages 1-127 and 134-137 as originally filed  
pages 128-133, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☒ the claims:  
pages 138-140, as originally filed  
pages NONE, as amended (together with any statement) under Article 19  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☐ the drawings:  
pages NONE, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☒ the sequence listing part of the description:  
pages 1-161, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**4. ☐ The amendments have resulted in the cancellation of:**

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The question whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been and will not be examined in respect of:

☒ the entire international application,

☐ claims Nos. \_\_\_\_

because:

☐ the said international application, or the said claim Nos. \_\_\_\_ relate to the following subject matter which does not require international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_ are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. \_\_\_\_ are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 1-24

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☒ the computer readable form has not been furnished or does not comply with the standard.

## SEQ ID NO:103 Human TRP-MET nucleic acid sequence

gi|187558|gb|J02958.1|

CDS:195..4421

GAATTCCGCCCTCGCCGCCCGGGCGCCCCGAGCGCTTTGTGAGCAGATGCGGAGCCGAGTGGAGGGCGCGAGCC  
AGATGCGGGGCGACAGCTGACTTGCTGAGAGGAGGCGGGGAGGCGCGGAGCGCGCGTGTGGTCTTGCGCCGCTG  
ACTTCTCCACTGGTTCTTGGGCACCGAAAGATAAACCTCTCATAATGAAGGCCCCCGCTGTGCTTGACCTGGCA  
TCCTCGTGCTCCTGTTTACCTTGGTGACAGGAGCAATGGGGAGTGTAAGAGGCACTAGCAAAGTCCGAGATGA  
ATGTGAATATGAAGTATCAGCTTCCCAACTTCACCGCGGAAACACCCATCCAGAATGTCATTCTACATGAGCATC  
ACATTTTCCTTGGTGCCACTAACTACATTTATGTTTTAAATGAGGAAGACCTTCAGAAGGTTGCTGAGTACAAGA  
CTGGGCTGTGCTGGAACACCCAGATTGTTTCCCATGTCAGGACTGCAGCAGCAAAGCCAATTTATCAGGAGGTG  
TTTGAAAGATAACATCAACATGGCTCTAGTTGTGACACCTACTATGATGATCAACTCATTAGCTGTGGCAGCG  
TCAACAGAGGGACCTGCCAGCGACATGTCTTTCCCAACAATCATACTGCTGACATACAGTCGGAGGTTCACTGCA  
TATTCTCCCCACAGATAGAAGAGCCCAGCCAGTGTCTGACTGTGTGGTGAGCGCCCTGGGAGCCAAAGTCCTTT  
CATCTGTAAAGGACCGGTTTCATCAACTTCTTTGTAGGCAATACCATAAATTCTTCTTATTTCCCAGATCATCCAT  
TGCATTTCGATATCAGTGAGAAGGCTAAAGGAAACGAAAGATGGTTTTATGTTTTTGACGGACCAGTCTACATTG  
ATGTTTTACCTGAGTTCAGAGATTCTTACCCCATTAAGTATGTCCATGCCTTTGAAAGCAACAATTTTATTTACT  
TCTTGACGGTCCAAAGGGAACTCTAGATGCTCAGACTTTTCACACAAGAATAATCAGGTTCTGTTCCATAAACT  
CTGGATTGCATTCCCTACATGGAAATGCCTCTGGAGTGATTCTCAGAGAAAAGAGAAAAAAGAGATCCACAAAGA  
AGGAAGTGTTTAATATACTTCAGGCTGCGTATGTCAGCAAGCCTGGGGCCCAGCTTGCTAGACAAATAGGAGCCA  
GCCTGAATGATGACATTCTTTTCGGGGTGTTTCGCACAAAGCAAGCCAGATTCTGCCGAACCAATGGATCGATCTG  
CCATGTGTGCATTCCCTATCAAATATGTCAACGACTTCTTCAACAAGATCGTCAACAAAAACAATGTGAGATGTC  
TCCAGCATTTTTACGGACCCAATCATGAGCACTGCTTAAATAGGACACTTCTGAGAAATTCATCAGGCTGTGAAG  
CGCGCCGTGATGAATATCGAACAGAGTTTACCACAGCTTTCAGCGCGTTGACTTATTCATGGGTCAATTCAGCG  
AAGTCCTCTTAACATCTATATCCACCTTCATTAAAGGAGACCTCACCATAGCTAATCTTGGGACATCAGAGGGTC  
GCTTCATGCAGGTTGTGGTTTCTCGATCAGGACCATCAACCCCTCATGTGAATTTCTCCTGGACTCCCATCCAG  
TGTCTCCAGAAGTGATTGTGGAGCATAACATTAAACCAAAATGGCTACACACTGGTTATCACTGGGAAGAAGATCA  
CGAAGATCCCATTTGAATGGCTTGGGCTGCAGACATTTCCAGTCTTGCAGTCAATGCCTCTCTGCCCCACCCTTTG  
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GTCTGCCTGCAATCTACAAGTTTTCCCAAATAGTGCACCCCTTGAAGGAGGGACAAGGCTGACCATATGTGGCT  
GGGACTTTGGATTTCGGAGGAATAATAAATTTGATTAAAGAAAAC TAGAGTTCTCCTTGAAATGAGAGCTGCA  
CCTTGACTTTAAGTGAGAGCACGATGAATACATTGAAATGCACAGTTGGTCCTGCCATGAATAAGCATTTCATA  
TGTCCATAATTATTTCAAATGGCCACGGGACAACACAATACAGTACATTCTCCTATGTGGATCCTGTAATAACAA  
GTATTTTCGCCGAAATACGGTCTATGGCTGGTGGCACTTTACTTACTTTAACTGGAAATTACCTAAACAGTGGGA  
ATTCTAGACACATTTCAATTGGTGGAACCATGTACTTTAAAAAGTGTGTCAAACAGTATTCTTGAATGTTATA  
CCCCAGCCCCAAACCATTTCAACTGAGTTTGCTGTTAAATTGAAAATTGACTTAGCCAACCGAGAGACAAGCATCT  
TCAGTTACCGTGAAGATCCCATTGTCTATGAAATTCATCCAACCAAATCTTTTATTAGTACTTGGTGGAAGAAC  
CTCTCAACATTGTCAGTTTTCTATTTTGCTTTGCCAGTGGTGGGAGCACAATAACAGGTGTTGGGAAAAACCTGA  
ATTCAGTTAGTGTCCCGAGAATGGTCATAAATGTGCATGAAGCAGGAAGGAACCTTTACAGTGGCATGTCAACATC  
GCTCTAATTCAGAGATAATCTGTTGTACCACTCCTTCCCTGCAACAGCTGAATCTGCAACTCCCCCTGAAAACCA  
AAGCCTTTTTTCATGTTAGATGGGATCCTTTCCAAATACTTTGATCTCATTTATGTACATAATCCTGTGTTTAAGC  
CTTTTGAAAAGCCAGTGATGATCTCAATGGGCAATGAAAATGTACTGGAAATTAAGGGAAATGATATTGACCCTG

AAGCAGTTAAAGGTGAAGTGTAAAGTTGAAAATAAGAGCTGTGAGAATATACACTTACATTCTGAAGCCGTTT  
TATGCACGGTCCCCAATGACCTGCTGAAATTGAACAGCGAGCTAAATATAGAGTGGAAGCAAGCAATTTCTTCAA  
CCGTCCTTGAAAAAGTAATAGTTCAACCAGATCAGAATTTACAGGATTGATTGCTGGTGTGTCTCAATATCAA  
CAGCACTGTTATTACTACTTGGGTTTTTCTGTGGCTGAAAAAGAGAAAGCAAATTAAGATCTGGGCAGTGAAT  
TAGTTCGCTACGATGCAAGAGTACACACTCCTCATTGGATAGGCTTGTAAGTGCCCGAAGTGTAAGCCCAACTA  
CAGAAATGGTTTCAAATGAATCTGTAGACTACCGAGCTACTTTTCCAGAAGATCAGTTTCCTAATTCATCTCAGA  
ACGGTTCATGCCGACAAGTGAGTATCCTCTGACAGACATGTCCCCATCCTAACTAGTGGGGACTCTGATATAT  
CCAGTCCATTACTGCAAAATACTGTCCACATTGACCTCAGTGCCTCTAAATCCAGAGCTGGTCCAGGCAGTGCAGC  
ATGTAGTGATTGGGCCCAGTAGCCTGATTGTGCATTTCAATGAAGTCATAGGAAGAGGGCATT'TTGGTTGTGTAT  
ATCATGGGACTTTGTTGGACAATGATGGCAAGAAAATTCAGTGTGCTGTGAAATCCTTGAACAGAATCACTGACA  
TAGGAGAAGTTTCCCAATTTCTGACCGAGGGAATCATCATGAAAGATTTTAGTCATCCCAATGTCCTCTCGCTCC  
TGGAATCTGCCTGCGAAGTGAAGGGTCTCCGCTGGTGGTCTACCATACATGAAACATGGAGATCTTCGAAATT  
TCATTGCAAAATGAGACTCATAATCCAAGTGTAAAAGATCTTATTGGCTTTGGTCTTCAAGTAGCCAAAGCGATGA  
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TCAAGGTTGCTGATTTTGGTCTTGCCAGAGACATGTATGATAAAGAATACTATAGTGACACAACAAAACAGGTG  
CAAAGCTGCCAGTGAAGTGGATGGCTTTGGAAAGTCTGCAAACTCAAAGTTTACCACCAAGTCAGATGTGTGGT  
CCTTTGGCGTCGTCTCTGGGAGCTGATGACAAGAGGAGCCCCACCTTATCCTGACGTAAACACCTTTGATATAA  
CTGTTTACTTGTGCAAGGGAGAAGACTCCTACAACCCGAATACTGCCAGACCCCTTATATGAAGTAATGCTAA  
AATGCTGGCACCCCTAAAGCCGAAATGCGCCCATCCTTTTCTGAACTGGTGTCCCGGATATCAGCGATCTTCTCTA  
CTTTCATTGGGGAGCACTATGTCCATGTGAACGCTACTTATGTGAACGTAAAATGTGTGCTCCGTATCCTTCTC  
TGTTGTCATCAGAAGATAACGCTGATGATGAGGTGGACACACGACCAGCCTCCTTCTGGGAGACATCATAGTGCT  
AGTACTATGTCAAAGCAACAGTCCACACTTTGTCCAATGGTTTTTCTACTGCCTGACCTTTAAAGGCCATCGAT  
ATTCTTTGCTCCTTGCCATAGGACTTGTATTGTTATTTAAATTACTGGATTCTAAGGAATTTCTTATCTGACAGA  
GCATCAGAACCAGAGGCTTGGTCCCACAGGCCAGGGACCAATGCGCTGCAG

# SEQ ID NO:104 Human TRP-MET polypeptide sequence

gi|307196|gb|AAA59591.1|

MKAPAVLAPGILVLLFTLVQRSNGECKEALAKSEMNVNMKYQLPNFTAETPIQNVILHEHHIFLGATNYIYVLNE  
EDLQKVAEYKTGPVLEHPDCFPQCDCSSKANLGGVWKDNINMALVVDITYDDQLISCGSVNRGTCQRHVFPNH  
TADIQSEVHCIFSPQIEEPSQCPDCVVSALGAKVLSSVKDRFINFFVGNTINSSYFPDHPHLSISVRRLKETKDG  
FMFLTDQSYIDVLPFRDSYPIKYVHAFESNNFIYFLTQVRETLDQTFHTRIIRFCSINSGLHSEMPLECIL  
TEKRKRSTKKEVFNILQAAYVSKPGAQLARQIGASLNDDILFGVFAQSKPDSAEPMDRSAMCAFPPIKYVNDFFN  
KIVNKNVRCLQHFYGNHEHCFNRTLNRSSGCEARRDEYRTEFTTALQRVDLPMGQFSEVLLTSISTFIKGD  
TIANLGTSEGRFMQVVVSRSRGPSTPHVNFLLDSHPVSPEVIVEHTLNQNGYTLVITGKKITKIPLNGLGRHFQS  
CSQCLSAPPFVQCWCHDKCVRSEECLSGTWTQQICLPAIYKVPNSAPLEGGTRLTICGWDFGFRNNKFDLKK  
TRVLLGNESCTLTLESTMTNLKCTVGPAMNKHFNMSIIISNGHGTQYSTFSYVDPVITSISPKYGPMAAGTLL  
TLTGNYLNSGNSRHSIGGKTCTLSVSNSILECYTPAQTISTEFAVKLKIDLANRETSIFSREDPIVYEIHPT  
KSFISTWWKEPLNIVSFLFCFASGGSTITGVGNLNSVSVPRMVINVHEAGRNFTVACQHRNSSEIICCTTPSLQ  
QLNLQLPLKTKAFFMLDGLSKYFDLIYVHNPVFKPFKPMISMGNENVLEIKGNDIDPEAVKGEVLKVGKNSC  
ENIHLHSEAVLCTVPNDLLKLNSLNIWKQAISSTVLGKIVIQPDQNFGLIAGVVSISTALLLLGLFLLWKK

PEI4US03/10025 .05012004

RKQIKDLGSELVRYDARVHTPHLDRLVSARSVSPTTEMVSNESVDYRATFPEDQFPNSSQNGSCROVQYPLTDM  
 PILTSGSDISSPLLQNTVHIDLALNPVQAVQHVIGPSSLIVHFNEVIGRGHFGCVYHGTLLDNDGKKIHC  
 AVKSLNRITDIGEVSQFLTEGIIMKDFSHPNVLSLLGICLRSEGSPLVVLPMKHGDLRNFIRNETHNPTVKDLI  
 GFGLQVAKAMKYLASKKFVHRDLAARNCMLDEKFTVKVADFGGLARDMYDKEYYSVHNKTGAKLPVKWMALESLOT  
 QKFTTKSDVWSFGVVLWELMTRGAPPYPDVNTFDITVYLLQGRLLQPEYCPDPLYEVMKLCWHPKAEMRPSFSE  
 LVSRI SAIFSTFIGEHYVHV NATYVNVKCVAPYPSLLSSEDNADDEV DTRPASFWETS

# SEQ ID NO:105 Mouse TRP-MET nucleic acid sequence

gi|6678867|ref|NM\_008591.1|

CDS:1..4140

ATGAAGGCTCCACCGTGCTGGCACCTGGCATTCTGGTGCTGCTGTTGTCCTTGGTGCAGAGGAGCCATGGGGAG  
 TGCAAGGAGGCCCTAGTGAAGTCTGAGATGAACGTGAACATGAAGTATCAGCTCCCCAACTTCACGGCAGAAACC  
 CCCATCCAGAATGTCTCTACACGGCCATCATATTTATCTCGGAGCCACAACTACATTTATGTTTTAAATGAC  
 AAAGACCTTCAGAAGGTATCCGAATTCAAGACCGGGCCCGTGTGGAACACCCAGATTGTTTACCTTGTCGGGAC  
 TGCAGCAGCAAAGCCAATTCATCAGGAGGGGTTTGGAAAGACAACATCAACATGGCTCTGCTTGTGACACATAC  
 TATGATGATCAACTCATTAGCTGTGGCAGTGTCAACAGAGGGACTTGCCAGCGGCATGTCTTCTCTCTGACAAT  
 TCTGCTGACATCCAGTCTGAGGTCCACTGCATGTTCTCCCCAGAAGAGGAGTCAGGGCAGTGTCTGACTGTGTA  
 GTGAGTGCCCTCGGAGCCAAAGTCCTCCTGTCTGGAAAAGGACCGGTTTCATCAATTTCTTTGTGGGGAATACGATC  
 AATTCTCTCTATCCTCTCTGGTTATTCACTGCATTTCGATATCGGTGAGACGGCTGAAGGAAACCCAAGATGGTTTT  
 AAGTTTTTGACAGACCAGTCTATATTGATGTCTTACCAGAATTCCTTGATTCTTACCCATAAAGTACATACAT  
 GCCTTCGAAAGCAACCATTTTATTTACTTTCTGACTGTCCAAAAGGAAACTCTAGATGCTCAGACTTTTCATACA  
 AGAATAATCAGGTTCTGTTCCGTAGACTCTGGGTTGCACTCCTACATGGAAATGCCCTGGAATGCATCCTGACA  
 GAAAAAGAAGGAAGAGATCCACAAGGGAAGAAGTGTTAATATCCTCCAAGCCGCGTATGTCAGTAAACCAGGG  
 GCCAATCTTGCTAAGCAAATAGGAGCTAGCCCTTCTGATGACATTCTCTTCGGGGTGTTTGACAAAGCAAGCCA  
 GATTCTGCTGAACCTGTGAATCGATCAGCAGTCTGTGCATTCCCCATCAAATATGTCAATGACTTCTTCAACAAG  
 ATTGTCACAACAAAACAACGTGAGATGTCTCCAGCATTTTTACGGACCCAACCATGAGCACTGTTTCAATAGGACC  
 CTGCTGAGAACTCTTCGGGCTGTGAAGCGCGCAGTGACGAGTATCGGACAGAGTTTACCACGGCTTTGCAGCGC  
 GTCGACTTATTTCATGGGCCGGCTTAACCAAGTGCTCCTGACATCCATCTCCACCTTCATCAAAGGTGACCTCACC  
 ATTGCTAATCTAGGGACGTGAGAAGGTGCTTCATGCAGGTGGTGCTCTCTCGAACAGCACACCTCACTCCTCAT  
 GTGAACTTCCTCCTGGACTCCCATCCTGTATCTCCAGAAGTTATTGTTGAGCATCCATCAAATCAAATGGCTAT  
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 AGTCAGTGCCTCTCTGCCCCTTACTTTATACAGTGTGGCTGGTGCCACAATCAATGTGTGCGTTTTGATGAATGC  
 CCCAGCGGTACATGGACTCAAGAGATCTGTCTGCCAGCGGTTTATAAGGTGTTCCCCACCAGCGCGCCCCCTTGAA  
 GGAGGAACAGTGTTGACCATATGTGGCTGGGACTTTGGATTAGGAAGAATAATAAATTTGATTTAAGGAAAACC  
 AAAGTTCTGCTTGGAACGAGAGCTGTACCTTGACCTTAAGCGAGAGCACGACAAATACGTTGAAATGCACAGTT  
 GGTCCCGCGATGAGTGAGCACTTCAATGTGTCTGTAATTATCTCAAACAGTCGAGAGACAACACAATACAGTGCA  
 TTCTCCTATGTAGATCCTGTAATAACAAGCATTTCTCCGAGGTACGGCCCTCAGGCTGGAGGCACCTTACTCACT  
 CTTACTGGGAAATACCTCAACAGTGGAATTCTAGACACATTTCAATTGGAGGGAAAACATGTACTTTAAAAAGT  
 GTATCAGATAGTATTCTTGAATGCTACACCCAGCCCAAACCTCTGATGAGTTTCTGTGAAATTGAAGATT  
 GACTTGGCTAACCGAGAGACCAGCAGCTTCAGTTACCGGAAGACCCCGTTGTCTATGAAATCCACCCAACCAAA  
 TCTTTTATTAGTGGTGGAAGCACATAACGGGTATTGGGAAGACCCTGAATTCGGTTAGCCTCCCAAAGCTGGTA

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ATAGATGTGCATGAAGTGGGTGTGAACTACACAGTGGCATGTCAGCATCGCTCAAATTCAGAGATCATCTGCTGC  
 ACTACTCCTTCACTGAAACAGCTGGGCCTGCAACTCCCCCTGAAGACCAAAGCCTTCTTCTGTTAGACGGGATT  
 CTTTCCAAACACTTTGATCTCACTTATGTGCATAATCCTGTGTTTGTAGCCTTTTGAAAAGCCAGTAATGATCTCA  
 ATGGGCAATGAAAATGTAGTGGAATTAAGGGAAACAATATTGACCCTGAAGCAGTTAAAGGTGAAGTGTTAAAA  
 GTTGGAATCAGAGCTGCGAGAGTCTCCACTGGCACTCTGGAGCTGTGTTGTGTACAGTCCCCAGTGACCTGCTC  
 AAAGTGAACAGCGAGCTAAATATAGAGTGGAAGCAAGCAGTCTCTTCAACTGTTCTTGGAAGGTGATCGTTCAA  
 CCGGATCAGAATTTTGCAGGATTGATCATTGGTGCAGTCTCAATATCAGTAGTAGTTTTGTTATTATCCGGGCTC  
 TTCCTGTGGATGAGAAAAGAGAAAGCATAAAGATCTGGGCAGTGAATTAGTTCGCTATGACGCAAGAGTACACACT  
 CCTCATTTGGATAGGCTTGTAAGTGCCCGAAGTGTAAGTCCAACCTACAGAGATGGTTTCAAATGAGTCTGTAGAC  
 TACAGAGCTACTTTTCCAGAAGACCAGTTTCCCAACTCCTCTCAGAATGGAGCATGCAGACAAGTGCAATATCCT  
 CTGACAGACCTGTCCCCATCCTGACGAGTGGAGACTCTGATATATCCAGCCCATTACTACAAAATACTGTTTAC  
 ATTGACCTCAGTGCTCTAAATCCAGAGCTGGTCCAAGCAGTTCAGCACGTAGTGATTGGACCCAGCAGCCTGATT  
 GTGCATTTCAATGAAGTCATAGGAAGAGGGCATTTTGGCTGTGTCTATCATGGGACTTTGCTGGACAATGACGGA  
 AAGAAAATTCAGTGCTGTGAAATCCTTGAATAGAATCACAGATATAGAAGAGGTCTCCCAGTTTCTGACTGAG  
 GGAATCATCATGAAAGACTTCAGCCATCCCAATGTTCTCTCACTCTTGGGAATCTGCCTGAGGAGTGAAGGGTCT  
 CCTCTGGTGGTCTGCCCCTATATGAAGCATGGAGATCTGCGAAATTTTCATTGAAACGAGACTCATAATCCAAC  
 GTGAAAGATCTTATAGGATTTGGCCTTCAAGTAGCCAAAGGCATGAAATATCTTGCCAGCAAAAAGTTTGTCCAC  
 AGAGACTTAGCTGCAAGAACTGCATGTTGGATGAAAAATTCAGTGCAAGGTTGCTGATTTCCGTCTTGCCAGA  
 GACATGTACGATAAAGAGTACTATAGTGTCCACAACAAGACGGGTGCCAAGCTACCAGTAAAGTGATGGCTTTA  
 GAGAGTCTGCAACGCAGAAGTTCACCACCAAGTCAGATGTGTGGTCTTTGGTGTGCTCCTCTGGGAGCTCATG  
 ACGAGAGGAGCCCCTCCTTATCCCGACGTGAACACATTTGATATCACTATCTACCTGTTGCAAGGCAGAAGACTC  
 TTGCAACCAGAATACTGTCCAGACGCCTTGACGAAGTGATGCTAAAATGCTGGCACCCTCAAGCGGAAATGCGC  
 CCGTCTTTTCCGAAGTGGTCTCCAGGATATCCTCAATCTTCTCCACGTTTATTGGGGAACACTACGTCCACGTG  
 AACGCTACTTATGTGAATGTAAAATGTGTTGCTCCATATCCTTCTCTGTTGCCATCCCAAGACAACATTGATGGC  
 GAGGGGAACACATGA

# **SEQ ID NO:106 Mouse TRP-MET polypeptide sequence**

gi|6678868|ref|NP\_032617.1|

MKAPTVLAPGILVLLLSLVQRSHGECKEALVKSEMNVMKYQLPNFTAETPIQNVVLHGHHIYLGATNYIYVLND  
 KDLQKVSEFKTGPVLEHPDCLPCRDCSSKANSSGGVWKDNINMALLVDITYDDQLISCGSVNRGTCQRHVLPPDN  
 SADIQSEVHCFMFSPEEESGQCPDCVVSALGAKVLLSEKDRFINFFVGNTINSSYPGYSLHSISVRRLKETQDGF  
 KFLTDQSYIDVLPFLDSYPIKYIHAFESNHFIYFLTVQKETLDAQTFHTRIIRFCSVDSGLHSYMEMPLECILT  
 EKRRKRSTREEVFNIQAAVSKPGANLAKQIGASPSDDILFGVFAQSKPDSAEPVNRSVAVCAFPKIKYVNDFFNK  
 IVNKNVNRCLQHFYGNHEHCFNRTLRLNSSGCEARSDEYRTEFTTALQRVDLFMGRNLNQVLLTSISTFIKGLT  
 IANLGTSEGRFMQVLSRTAHLTPHVNFLLDSPVVSPEVIVEHPSNQNGYTLVVTGKKITKIPLNGLGCGHFQSC  
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# SEQ ID NO:107 Rat TRP-MET nucleic acid sequence

gi|13928699|ref|NM\_031517.1|

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# SEQ ID NO:108 Rat TRP-MET polypeptide sequence

gi|13928700|ref|NP\_113705.1|

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